6.0 Analysis of Long Term Effects

CEQA requires discussion of the cumulative, growth-inducing, energy, and long-term impacts of proposed projects. The following sections address these issues as related to implementation of the Specific Plan.

Cumulative Impacts

The CEQA Guidelines (Section 15355) define a cumulative impact as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable (CEQA Guidelines Section 15130[a]). An impact is considered cumulatively considerable when "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (Section 15065[a][3]). "The discussion of cumulative impacts shall reflect the severity of the impacts and the likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effect attributable to the proposed project alone" (Section 15130[b]). According to Section 15130 of the CEQA Guidelines, an environmental impact report must describe and analyze cumulative impacts only if the impact is significant and the project's incremental effect is cumulatively considerable.

Section 15130(b)(1) of the CEQA Guidelines identifies two methods to determine the scope of related projects for cumulative impact analysis:

> List-of-Projects Method: a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency.
>
> Summary-of-Projections Method: a summary of projections contained in an adopted general plan or related planning document or in a prior environmental document that has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

Because of the long-term scope of the proposed Specific Plan, the appropriate method for cumulative impact analysis is the projection method. This method is appropriate because the projections would serve as a guide to determine if the Specific Plan is consistent with the long-term population, employment, and household projections of the region. If the proposed Specific Plan is generally consistent with regional projections, then it would also generally be consistent with regional efforts to address environmental problems such as air quality and traffic. Furthermore, predicting a list of probable future projects over the 20-year implementation period (through 2036) of the proposed Specific Plan is not feasible.

In support of the Regional Transportation Plan (RTP), Sustainable Communities Strategy (SCS), and other regional planning efforts, the Southern California Association of Governments (SCAG) developed a series of projections utilizing a comprehensive analysis of fertility, mortality, migration, labor force, housing units, and local policies such as land use plans. Population, housing, and employment forecasts for Duarte and neighboring communities are summarized in Table 6-1 (SCAG 2012-2040 Growth Forecast).

Table 6-1
SCAG 2012-2040 Growth Forecast

	Population			Households			Employment		
	2012	2040	%	2012	2040	%	2012	2040	%
Duarte	21,500	24,300	+13.0	7,000	8,200	+17.1	10,100	11,900	+17.8
Monrovia	36,800	40,300	+9.5	13,800	15,300	+10.9	19,700	23,300	+18.3
Bradbury	1,100	1,200	+9.1	400	400	--	100	200	+100

Land Use and Planning

SCAG projects an increase in population of approximately 13 percent between the years 2012 and 2040 for the City of Duarte, which is slightly greater than projected growth for neighboring communities (Monrovia and Bradbury). Future growth within the Planning Area would affect the sub-regional land use and transportation patterns and intensities, thereby contributing to cumulative effects on regional infrastructure, jobs/housing balance, air quality, and other environmental issues that span a regional context.

Duarte is a member city of SCAG, the Metropolitan Planning Organization (MPO) that prepares and administers regional growth management strategies and allocation of Federal transportation funding for a six-county area, including Ventura, Los Angeles, San Bernardino, Riverside, Orange, and Imperial Counties. As the designated MPO, SCAG is mandated by the Federal government to prepare regional plans for transportation, growth management, hazardous waste management, and air quality. Additional mandates exist at the State level. As discussed in Section 4.1 (Land Use and Planning) of this SEIR, the proposed Specific Plan is consistent with, and would not conflict with, the implementation of relevant goals and policies of SCAG's Regional Comprehensive Plan and Guide (RCPG) and Regional Transportation Plan (RTP). Therefore, the proposed Specific Plan would not make a cumulatively considerable contribution to cumulative impacts on regional land use and planning.

Population and Housing

Rates of growth will occur in response to a variety of regional and national socioeconomic factors, including birth rates, migration from other states and other countries, land values, employment opportunities, interest rates, housing supply, demand and pricing, and broad regional and national economic conditions. Growth forecasts have been developed by SCAG (see Table 6-1, above). The projected population growth within the City limits of Duarte from 2012 to 2040 is 13 percent. The proposed Specific Plan could accommodate an additional 3,150 residents within the Planning Area. By itself, the proposed Specific Plan would not induce substantial growth elsewhere within the region. The proposed Specific Plan could accommodate an additional 577 jobs within the Planning Area.

Within the City of Duarte, the Duarte Station Specific Plan and the City of Hope Master Plan would also accommodate additional residential and employment growth. The Duarte Station Specific Plan would accommodate up to 475 housing units, 250 hotel rooms, 400,000 square feet of office space, and 12,000 square feet of retail space. The Duarte Station Specific Plan Area would accommodate an additional 1,430 residents and provide an additional 1,418 jobs.[1] The City of Hope Medical Center, in response to the demand for patient care services and research activities, is developing a Master Plan for its 110-acre campus in Duarte. This would provide additional professional health-related employment within the City. The additional residential units provided by the proposed Town Center Specific Plan and the Duarte Station Specific Plan would accommodate the employees of the additional jobs created within the Planning Area, Duarte Station Specific Plan Area, and the at the City of Hope campus. Although these increases in population, housing, and employment would be greater than anticipated by SCAG, the City of Duarte would be providing sufficient housing to accommodate increases in population and employment, all within its borders. In addition, the Duarte Station Specific Plan and proposed Town Center Specific Plan would provide housing and employment in close proximity to the new Metro Gold Line Station and, therefore, would provide regional connectivity to a future job and housing center within the City of Duarte. Therefore, with consideration of other long-range plans

and regional projections, the proposed Specific Plan would not make a cumulatively considerable contribution to cumulative impacts on population, housing, and employment.

Aesthetics

As population and economic growth continue within the City of Duarte over time, new development would contribute to the continued expansion of an urban pattern throughout the San Gabriel Valley. This urbanization would add light sources, structures, and changes to the visual character of the Valley, resulting in impacts related to light and glare, shade and shadow, and scenic views. The proposed Specific Plan provides for a wide diversity of growth within the Planning Area. The Planning Area is primarily built out. The Specific Plan provides for the development of mixed uses and public facilities along Huntington Drive, commercial and mixed uses along Buena Vista Street south of Huntington Drive, and mixed uses and residential uses along Highland Avenue south of Huntington Drive.

Mixed-use development would likely consist of residential uses above ground floor commercial. Future development within the Planning Area would be subject to the policies and implementation measures of the General Plan, existing development standards, and Specific Plan components and design standards. These include proactive measures that support cohesive design of high-quality development and minimize light and glare impacts while preserving natural scenic features. As future growth in the Planning Area, as guided by the Specific Plan, contributes to the gradual urbanization of the San Gabriel Valley, Specific Plan components and design standards would help ensure that the Specific Plan's contribution to the visual environment would be beneficial. The Specific Plan would not make a cumulatively considerable contribution to cumulative aesthetic impacts.

Traffic and Circulation

Cumulative circulation and Congestion Management Program (CMP) impacts through the year 2036 (the Specific Plan horizon year) are analyzed in Section 4.4 and found to be less than significant with implementation of mitigation. There are no CMP arterial roadways within the Planning Area, and no CMP arterial monitoring intersections in the vicinity of the Planning Area would experience 50 or more additional trips resulting from Specific Plan Implementation. The I-210 and I-605 would not experience 150 or more Specific Plan-related trips in either direction during the peak hour. The proposed Specific Plan would be consistent with regional plans such as the CMP, Air Quality Management Plan (AQMP), and Regional Mobility Plan (RMP); therefore, the project would not make a considerable contribution to cumulative impacts related to regional traffic and circulation.

Air Quality and Greenhouse Gas Emissions

The context for assessing cumulative air quality impacts is the South Coast Air Basin in terms of national and State criteria pollutant standards. The immediate vicinity of the Planning Area is the context for localized levels of criteria pollutants and toxic emissions. As discussed in Section 4.5, the proposed Specific Plan would not conflict with the 2012 regional AQMP prepared by the South Coast Air Quality Management District (SCAQMD). However, as discussed in Section 4.5, buildout of the Specific Plan would result in significant cumulative long-term emissions impacts within the Planning Area. Proposed mixed-use/higher-density development policies would implement an important regional strategy to encourage more compact urban/infill development, which helps reduce total vehicle trips and average trip distances. This would help reduce vehicle emissions. The City would continue to evaluate short-term, construction-related impacts and long-term impacts for discretionary land use projects, so that best available control measures can be applied, where warranted, to minimize the effects of individual development projects.

Long-term emissions of PM_{10} and $PM_{2.5}$ generated by development under the Specific Plan could interfere with attainment of SCAQMD PM_{10} and $PM_{2.5}$ standards. Therefore, long-term cumulative air quality impacts on the region would remain potentially significant and unavoidable, and the Specific Plan would make a cumulatively considerable contribution to those impacts.

Climate change is inherently a cumulative impact due to its global effects. Development facilitated by the proposed Specific Plan would include activities that emit greenhouse gases over the short and long term. While one project would not cause global climate change, individual projects would contribute cumulatively to greenhouse gas emissions that result in climate change. As discussed in Section 4.5, buildout of the proposed Specific Plan would be consistent with statewide greenhouse gas emissions reduction requirements. Therefore, the Specific Plan would not make a cumulatively considerable contribution to cumulative impacts related to climate change.

Noise

Implementation of the proposed Specific Plan would not generate new stationary noise sources outside of the Planning Area and would not, therefore, result in cumulatively considerable noise impacts involving stationary noise sources. Additional traffic volumes associated with future growth in the Planning Area would combine with regional traffic on major, inter-jurisdictional roads and highways leading to Duarte, which would contribute to cumulative effects involving roadway noise. The level of traffic noise attributable to the Specific Plan trips that would occur outside the Planning Area would increase incrementally over a long period of time (the Specific Plan horizon year is 2036) and would not make a cumulatively considerable contribution to cumulative changes in roadway noise levels in the context of regional traffic growth.

Geology and Seismic Hazards

Future development within the Planning Area would increase the number of people exposed to earthquake-induced ground shaking and other seismically induced ground hazards, such as liquefaction. Future development could also occur in areas with unsuitable, unstable soils. The context for assessing cumulative geologic and seismic impacts is statewide, considering the majority of California is subject to some type of seismic or geologic hazard. The specific types and extent of these hazards and constraints are due to localized conditions that are routinely addressed during the City's standard, mandatory review of design-level project plans and geotechnical analyses to ensure compliance with adopted building codes, grading regulations, and site-specific geotechnical recommendations. In surrounding jurisdictions, similar local regulations and building code requirements would minimize exposure of people and structures to geologic and seismic hazards. The proposed Specific Plan would not make a cumulatively considerable contribution to cumulative impacts related to geologic and seismic hazards.

Hydrology and Drainage

Groundwater Levels and Water Supply

The Planning Area is served by the Los Angeles County District of California American Water. The City of Duarte obtains 100 percent of its water from local groundwater. Future growth throughout the Planning Area and the region would increase the need for local water supplies, contributing to cumulative strains on groundwater resources and the potential to substantially lower the water table. Expanding development typically hinders groundwater recharge as well because paving and other impervious surfaces prevent or redirect water from the soil, thereby reducing or eliminating percolation in some locations.

The context for assessing impacts on groundwater resources is the groundwater basin and the pumping from it. As indicated in Section 4.8, the Main San Gabriel Basin has been adjudicated to determine safe yield pumping limits to prevent over-drafting and substantial decrease in groundwater levels. As further indicated in Sections 4.8 and 4.12, the proposed Specific Plan development capacity is anticipated to be within the anticipated water supply production pursuant to the California American Water Los Angeles County District Urban Water Management Plan (UWMP), in accordance with the safe yield amounts. In addition, the General Plan promotes sustainable development practices and supports compliance with water conservation measures. Although the UWMP indicates adequate supply and General Plan policies would ensure conservation of water resources, recent drought conditions cause uncertainty in future water supply. Therefore, the proposed Specific Plan has been determined to result in significant and unavoidable impacts related to water supply and would make a cumulatively considerable contribution to cumulative impacts on groundwater resources.

Drainage and Water Quality

Future growth in the Planning Area and the region would include a variety of land use forms, street improvements, and impervious surfaces that could increase the volume of urban runoff that would need to be captured and discharged into the City's municipal storm drain system, the County's regional flood control facilities, and ultimately the Pacific Ocean. The General Plan and proposed Specific Plan support low impact development practices and appropriate drainage practices to prevent erosion, sedimentation, and flooding. This, coupled with existing regulations such as the National Discharge Elimination System (NPDES) and other erosion control measures, would ensure that long-term changes to the drainage pattern of the Planning Area do not substantially impact downstream water bodies or surrounding properties. The project's contribution to regional drainage and water quality impacts would not be cumulatively considerable.

Public Health and Safety

Hazardous Materials

The context for assessing cumulative hazardous materials impacts involves existing and potential development within the Planning Area and those surrounding areas that could result in the use, transport, or disposal of hazardous materials or wastes. Typical uses of concern would include industrial activities, utility providers, and waste management services.

As development occurs within the Planning Area and surrounding jurisdictions, particularly in industrial land use designations, the use, transport, and disposal of hazardous materials and wastes would increase. Concurrently, as the population and employment base increase in the area, the potential for exposure of people to hazardous materials and wastes becomes greater. Regulation of hazardous substances and wastes, including manufacturing, storage, processing, transportation, and disposal activities, would continue to be governed mainly by Federal and State agencies. The Los Angeles County Fire Department would continue to conduct inspections and review hazardous materials storage and containment provisions at local businesses. The proposed Specific Plan would not conflict with any such authorities or standard practices involving responses to hazardous materials releases. The proposed Specific Plan would not provide for any new or more dangerous types of hazardous materials or wastes to be generated, stored, or transported within the Planning Area or outside the Planning Area. The proposed Specific Plan would not result in a considerable contribution to the cumulative regional increase in the use, transport, disposal, or exposure to hazardous materials or wastes.

Wildfires

The context for assessing wildfire hazards exists wherever the urban environment interfaces with wildlands. Cumulative wildfire impacts can occur as development in fire hazard areas increases, not only because the number of people and structures exposed to wildfires is increasing but also because increased density supports the spreading of wildfires. The Planning Area is located in an urbanized area, and no portion of the Planning Area is subject to high or very high wild fire hazards. The proposed Specific Plan would not result in the exposure of potential development to wildfire hazards. The project would not make a cumulatively considerable contribution to cumulative impacts related to wildfires.

Flooding

The context for assessing flooding impacts is in those areas subject to 100-year floods in and around the Planning Area. This is particularly relevant if structures are constructed in the floodplain and 100-year flood waters are changed or redirected to areas where flooding previously did not exist. No portion of the Planning Area is within a 100-year flood zone. Therefore, future development associated with the Specific Plan would not place homes within any flood zones and impact downstream properties due to any modification to the floodplain. Future development as guided by the proposed Specific Plan would not make a cumulatively considerable contribution to cumulative flooding impacts on future homes or other structures.

Cultural Resources

The context for assessing cumulative impacts on buried human remains and resources is any native, subsurface soils in the Planning Area and the potential cultural relationship to the region and the State. The General Plan includes policies and implementation measures, and the General Plan EIR incorporates mitigation measures, that provide an ongoing program to ensure proper identification, evaluation, recovery, and protection of potentially important historical, archaeological, and paleontological resources that may be disturbed during future development activities. Existing State law requires immediate County Coroner notification upon discovery of human remains and also notification of affected Native American tribes if the remains are suspected to be of Native American origin. Surrounding jurisdictions are subject to similar regulations, including coroner notification upon discovery of human remains. Although long-term development throughout the Planning Area and the San Gabriel Valley has the potential to impact historic structures and subsurface archaeological and paleontological remains, existing General Plan policies, implementation measures, and mitigation measures would ensure that such resources are not substantially impacted within the Planning Area. The Specific Plan's contribution to the future cumulative loss of cultural resources would not be cumulatively considerable.

Biological Resources

The context for assessing cumulative impacts on biological resources includes sensitive species and their habitat throughout the San Gabriel Valley. Future development within the Planning Area and throughout the San Gabriel Valley would incrementally replace native habitat with urbanization. To address the long-term, cumulative loss of sensitive habitat and associated species in the San Gabriel Valley, the City would continue to implement existing Federal and State regulations related to species and habitat protection and conservation. Considering the proposed Specific Plan consistency with existing Federal and State regulations and the lack of native habitat within the Planning Area, the Specific Plan's contribution to the cumulative loss of sensitive habitat and species would not be cumulatively considerable.

Public Services

The context for analyzing impacts related to public services is the relationship between local and regional population and urban growth and the concurrent need of individual service providers to expand facilities to meet the increasing demand. The General Plan includes policies designed to ensure that appropriate levels of service are provided by requiring funding, facilities expansion, and service enhancements commensurate with long-term development in the Planning Area.. As detailed in Sections 4.14 through 4.16, Specific Plan impacts related to fire and police protection and school services would be less than significant. Therefore, increased demand within the Planning Area would not result in insufficient service levels that would impact public services in nearby jurisdictions. The proposed Specific Plan would not make a cumulatively considerable contribution to cumulative impacts associated with public services.

Parks, Recreational Facilities, and Trails

Local and community recreation resources are provided for the benefit of the immediate vicinity and generally are not subject to cumulative impacts. The context for assessing cumulative impacts on parks and recreation resources are at the regional level, where multi-jurisdictional growth would put pressure on the availability and condition of parks and recreation facilities. Incremental residential growth in the Planning Area would increase the demand for local, community, and regional recreation resources. As discussed in Section 4.17, the City of Duarte provides adequate parkland to meet minimum recommendations to accommodate projected growth for the City. Therefore, the Specific Plan would not make a cumulatively considerable contribution to cumulative impacts on regional recreation facilities.

Utilities and Service Systems

The context for assessing cumulative impacts on utilities and services systems varies depending on the service area and capacity of the utility, which may vary from the Planning Area, San Gabriel Valley, or (in terms of water) even statewide. Long-term maintenance and potential expansion of water, wastewater, flood control, and solid waste

disposal facilities would be required as the region continues to grow and existing infrastructure ages. All utility providers currently impose development impact fees, connection fees, and service fees designed to maintain and incrementally expand infrastructure to meet existing and growing demand. Future development in the Specific Plan vicinity and throughout the region would be subject to such fees in accordance with applicable ordinances and service master plans. The General Plan includes policies and mitigation measures that support water conservation and recycling, and adequacy of services systems, which would reduce impacts on regional utilities.

The UWMP for California American Water indicates that future water supply would be sufficient to accommodate future populations within Duarte. However, recent drought conditions cause uncertainty in future water supply. Therefore, the proposed Specific Plan has been determined to result in significant and unavoidable impacts related to water supply and would make a cumulatively considerable contribution to cumulative impacts on water supply.

Growth-Inducing Impacts

Pursuant to Section 15126.2(d) of the State CEQA Guidelines, the contents of an EIR must address the growth-inducing impacts of a project, as follows:

> *Growth-Inducing Impacts of the Proposed Project. Discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow more construction in service areas). Increase in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*

Growth-inducing effects include ways in which the Specific Plan could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. A prime example is a major infrastructure project or road extension which provides urban service capacities to currently undeveloped areas, thus removing an obstacle to population growth.

The proposed Specific Plan is specifically intended to provide for the orderly growth of the Planning Area to achieve economic, environmental, and quality of life benefits. Nothing in the Specific Plan proposes new infrastructure systems to facilitate growth of undeveloped areas that were not proposed in the existing General Plan. There are no proposed policies, regulations, or ordinances that are part of or implied by the Specific Plan that would encourage or enable significantly higher levels of growth than have been anticipated in regional forecasts by SCAG. Improvements to the roadways listed in this Supplemental EIR are intended to achieve desired levels of service as growth occurs, rather than facilitate growth beyond what is planned for in the existing General Plan.

Projects permitted pursuant to land use policy would provide for additional housing, create a better balance of residential and non-residential uses in the community, promote organized and pedestrian-friendly commercial development, and protect natural resources. Implementation of the Specific Plan would result in a more inclusive community, maintain a balance between housing and employment, and foster a stable economic base and diverse employment opportunities.

Energy Conservation

This energy conservation analysis has been prepared pursuant to California Public Resources Code Section 21100(b)(3) and Appendix F of the California Environmental Quality Act (CEQA) Guidelines.

The purpose of this analysis is to assess the short- and long-term energy demand of the proposed Specific Plan, identify proposed and required conservation measures, and assess the extent to which the Specific Plan would conserve energy. Project energy demand would not be wasteful, inefficient, or unnecessary if it does not increase energy demand over typical construction and operating requirements.

Appendix F of the State CEQA Guidelines states that the goal of assessing energy conservation in a project is to ensure the wise and efficient use of energy. Energy efficiency is achieved by decreasing energy consumption, decreasing reliance on fossil fuels, and increasing reliance on renewable energy sources. The guidelines for analysis of energy conservation provided in Appendix F of the State CEQA Guidelines are provided herein.

CEQA Appendix F: Energy Conservation

I. Introduction

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

(1) decreasing overall per capita energy consumption,
(2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and
(3) increasing reliance on renewable energy sources.

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy (see Public Resources Code section 21100(b)(3)). Energy conservation implies that a project's cost effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, cost effectiveness may be determined more by energy efficiency than by initial dollar costs. A lead agency may consider the extent to which an energy source serving the project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production.

II. EIR Contents

Potentially significant energy implications of a project shall be considered in an EIR to the extent relevant and applicable to the project. The following list of energy impact possibilities and potential conservation measures is designed to assist in the preparation of an EIR. In many instances specific items may not apply or additional items may be needed. Where items listed below are applicable or relevant to the project, they should be considered in the EIR.

A. Project Description may include the following items:

1. *Energy consuming equipment and processes which will be used during construction, operation and/or removal of the project. If appropriate, this discussion should consider the energy intensiveness of materials and equipment required for the project.*
2. *Total energy requirements of the project by fuel type and end use.*
3. *Energy conservation equipment and design features.*
4. *Identification of energy supplies that would serve the project.*
5. *Total estimated daily vehicle trips to be generated by the project and the additional energy consumed per trip by mode.*

B. Environmental Setting may include existing energy supplies and energy use patterns in the region and locality.

C. Environmental Impacts may include:

1. *The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.*
2. *The effects of the project on local and regional energy supplies and on requirements for additional capacity.*
3. *The effects of the project on peak and base period demands for electricity and other forms of energy.*
4. *The degree to which the project complies with existing energy standards.*
5. *The effects of the project on energy resources.*
6. *The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.*

D. Mitigation Measures may include:

1. *Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures were incorporated in the project and why other measures were dismissed.*
2. *The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, increase water conservation and reduce solid waste.*
3. *The potential for reducing peak energy demand.*
4. *Alternate fuels (particularly renewable ones) or energy systems.*
5. *Energy conservation which could result from recycling efforts.*

E. Alternatives should be compared in terms of overall energy consumption and in terms of reducing wasteful, inefficient and unnecessary consumption of energy.

F. Unavoidable Adverse Effects may include wasteful, inefficient and unnecessary consumption of energy during the project construction, operation, maintenance and/or removal that cannot be feasibly mitigated.

G. Irreversible Commitment of Resources may include a discussion of how the project preempts future energy development or future energy conservation.

H. Short-Term Gains versus Long-Term Impacts can be compared by calculating the project's energy costs over the project's lifetime.

I. Growth Inducing Effects may include the estimated energy consumption of growth induced by the project.

Energy Demand

Short-term energy demand would result from development construction facilitated by the proposed Specific Plan. This would include energy demand from worker and vendor vehicle trips and construction equipment usage. Long-term energy demand would result from operation of various development types (land uses) facilitated by the Specific Plan. This would typically include energy demand from vehicle trips, electricity and natural gas usage, and water and wastewater conveyance. This section describes the energy needs of these activities.

Construction Activities

Future development facilitated by the Specific Plan would result in short-term energy demand during site preparation, grading, building construction, paving, and painting activities associated with new development. Energy demand results from equipment use and worker, vendor, and hauling trips.

Operational Activities

Future development facilitated by the Specific Plan would result in long-term energy demand from mobile sources, electricity and natural gas use, and water and wastewater conveyance.

Mobile Sources

Mobile source energy demand primarily is associated with individual vehicle energy demand, primarily gasoline and diesel fuel, as well as electricity for electric vehicles. Mobile source energy demand is also associated with public transportation, such as buses and trains running on natural gas, diesel fuel, or electricity. Of all operational energy demands, the proposed Specific Plan seeks most to reduce the energy demand of mobile sources, through improved land use and multi-modal circulation network planning to reduce reliance on individual vehicles and promote use of public transportation, as well as non-motorized transportation such as walking and biking. By seeking to reduce the amount of individual vehicle usage, the proposed Specific Plan would achieve reductions in mobile source operational energy demand.

Electricity and Natural Gas Use

Electricity and natural gas would provide energy to the proposed development of residential, commercial, and other land uses provided for in the proposed Specific Plan. All new development and redevelopment would be subject to current California Building Code (CBC) requirements for building energy efficiency and the City's Development Code requirements for sustainable development (Development Code Chapter 19.52 [Sustainable Development Practices].

Water and Wastewater

Electricity would be required to treat and convey water to, and convey wastewater away from, development facilitated by the proposed Specific Plan. Pursuant to the Water Conservation in Landscaping Act, outdoor water use and conservation would continue to be regulated for new development.

Energy Conservation

Future developments within the Planning Area would be subject to State water efficiency regulations pursuant to the California Building Code (CBC), which would reduce long-term project energy demand. These requirements would reduce wasteful, inefficient, and unnecessary consumption of energy over the long-term.

California Building Code

Pursuant to the CBC CALGREEN requirements, the proposed Specific Plan would be subject to the following requirements:[2]

- 20 percent reduction in water demand (5.303.2)
- 20 percent reduction in wastewater discharges (5.303.4)

Reduce Water and Wastewater Demand (5.303.2 & 5.303.4)

The minimum 20 percent reduction in water demand and wastewater discharges would decrease indoor water demand and wastewater discharges. This would result in a concurrent reduction in energy demand to supply, treat, and convey water and wastewater.

Conclusion

The conservation of energy would result from implementation of the CBC and General Plan and Specific Plan policies seeking to reduce individual vehicle use. With implementation of existing regulations and policies, as well as policies within the Specific Plan, energy demand for development facilitated by the proposed Specific Plan would not be wasteful, inefficient, or unnecessary.

Significant Irreversible Environmental Changes

The proposed Specific Plan provides a regulatory framework to guide future growth into both infill and undeveloped sites within the Planning Area. Once land is developed with a certain type of land use, reversion to open space for conservation, resource management, or other purposes is highly unlikely.

An irreversible commitment of non-renewable natural resources is inherent in any development project. Such resources would include, but are not limited to, lumber and other related forest products for building construction; sand and gravel for driveways and grading activities, a variety of metals used in the manufacture of building materials such as steel, copper piping and wiring, etc., along with hydrocarbon-based fuel sources that require extraction and chemical alteration and/or combustion of natural resources such as oil, natural gas, coal, and shale.

The proposed Specific Plan represents a long-term commitment to the consumption of energy for electricity, water and space heating, water supply and treatment, and fuels to power various modes of motorized transportation including automobiles and landscape equipment. Impacts associated with long-term energy consumption would depend on the energy sources and methods of producing energy. Typical hydrocarbon-based sources produce higher volumes of various criteria air pollutants and greenhouse gases than renewable energy sources such as wind and solar power or alternative fuel sources such as biodiesel and cellulosic ethanol. To the extent that hydrocarbon-based fuel sources are replaced with less polluting, renewable sources; emissions would be reduced.

Significant Unavoidable Environmental Impacts

The analysis presented in the General Plan EIR and Section 4 of this Supplemental EIR found that impacts related to cumulative criteria pollutant emissions at the regional and local level would be significant and unavoidable after consideration of feasible mitigation. Availability of water supply was also found to result in significant and unavoidable impacts after consideration of feasible mitigation.

References

1 City of Duarte. Duarte Station Specific Plan Draft Environmental Impact Report. Section 5.3 Population and Housing. September 19, 2013

2 California Building Standards Commission. California Building Code. January 2011

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7.0 Effects Found Not to be Significant

CEQA Guidelines Section 15128 requires a statement indicating the reason that various possible significant effects are determined not to be significant and therefore are not discussed in the EIR.

An Initial Study was prepared for the previously certified General Plan EIR and circulated publicly on March 12, 2007. In the course of this evaluation prepared for the previously certified General Plan EIR, certain impacts of the General Plan Update were found to be less than significant due to the inability of the General Plan update to create such impacts or the absence of project characteristics producing effects of this type. The following discussion briefly describes the potential impacts found not to be significant as a result of implementation of the General Plan Update.

The Initial Study prepared for the Town Center Specific Plan Supplemental EIR was publicly circulated for a 30-day period beginning October 23, 2015. The Initial Study determined that the impacts related to aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, mineral resources, public services, and recreation would not occur or would be less than significant; however, in order to maintain consistency with the previously certified General Plan EIR, impacts analyzed in this Supplemental EIR are the same as those analyzed in the certified General Plan EIR.

Initial Study Environmental Checklist Conclusions

The following impacts were identified as "no impact" or "less than significant impact" in the Initial Study prepared for the certified General Plan EIR that was circulated on March 12, 2007.

Aesthetics

- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Agricultural Resources

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- Conflict with existing zoning for agricultural use, or a Williamson act contract.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.
- Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.*
- Result in the loss of forest land or conversion of forest land to non-forest use.*
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.*

Air Quality

- Create objectionable odors affecting a substantial number of people.

* *The previously certified General Plan EIR did not analyze impacts to forestry resources because the certified General Plan EIR was certified before the CEQA Appendix G Initial Study Checklist included forestry resources. The Initial Study prepared for the certified General Plan EIR determined that no impacts to agricultural resources would result due to the built-out nature of the City. There are no lands used for or designated for agricultural or forestry resources within the City of Duarte. Therefore, no impact to forestry resources would result due to the built-out nature of the City and the proposed Planning Area.*

Biological Resources

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc,) through direct removal, filling, hydrological interruption, or other means.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Geology and Soils

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

Hazardous and Hazardous Materials

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

Hydrology and Water Quality

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Inundation by seiche, tsunami, or mudflow.

Land Use and Planning

- Physically divide an established community.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Mineral Resources

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Noise

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

Population and Housing

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement of housing elsewhere.

Transportation/Traffic

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Result in inadequate parking capacity.

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8.0 Preparation Team

Lead Agency

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9.0 References

California American Water

Mark Reifer, Operations Engineer – June 14, 2016
Geoffrey Williamson, Operations Specialist – June 14, 2016

Duarte Unified School District

Bradley Patterson, Chief Facilities Officer – June 9, 2016

Los Angeles County Fire Department

Juan Palomino, Station 44 – June 13, 2016
Lorraine Buck, Planning Division – June 10, 2016

Sanitation Districts of Los Angeles County

Adriana Raza, Customer Service Specialist, Facilities Planning Department – June 14, 2016
Paul Prestia, Division Engineer, Facilities Planning Department – June 14, 2016

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